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09/596,864	06/19/2000	Ashutosh Dutta	AP32551 070050.1303	7062

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EXAMINER

WINDER, PATRICE L

ART UNIT	PAPER NUMBER
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2145

DATE MAILED: 09/03/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/596,864

Applicant(s)

DUTTA ET AL.

Examiner

Patrice Winder

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6, 7</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

On page 6, starting at line 20, "server 100" is referred to as "source 100"; and

On page 15, starting at line 8, the "local server" of Figure 4 is referred to as "local station".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-2, 9-12 21-25, 31-32, 34 and 36-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al., USPN 6,741,575 B1 (hereafter referred to as Zhang).

6. Regarding claim 1, Zhang taught a method for providing a broadcast of content to a receiver via a communication network (abstract), comprising:

a) receiving the broadcast on at least one global multicast channel (column 6, lines 12-15, column 13, lines 1-3);

b) associating at least one local multicast channel with the at least one global multicast channel (column 12, lines 52-67);

c) connecting the receiver to the at least one local multicast channel (column 12, lines 19-29); and

d) routing the broadcast from the at least one global multicast channel to the at least one local multicast channel to provide the broadcast to the receiver (column 13, lines 1-22).

7. Regarding dependent claim 2, Zhang taught further comprising the step of: e) receiving a request from the receiver to receive the broadcast (column 13, lines 26-33).

8. Regarding dependent claim 9, Zhang taught further comprising the step of:
o) at a predetermined time and using a multicast communication (column 14, lines 59-62), determining a number of receivers, which are receiving the broadcast (column 15, lines 3-8).

9. Regarding dependent claim 10, Zhang taught the receiver includes an Internet Protocol (IP) interface which enables the receiver to receive the broadcast via an IP type multicast communication (column 8, lines 55-60).

10. Regarding dependent claim 11, Zhang taught the receiver is wireless and receives the broadcast in a first subnet using a multicast communication (column 6, lines 12-21), and further comprising the step of:

p) receiving, from the receiver, a request to receive the broadcast in a second subnet so as to move the real-time broadcast from the first subnet to the second subnet (column 9, lines 34-43); and

q) after receiving the request from the receiver, providing the broadcast to the wireless receiver in the second subnet using the multicast communication (column 10, lines 6-21, column 12, lines 19-29).

11. Regarding dependent claim 12, Zhang taught further comprising the step of:

r) stopping a transmission of the broadcast in the first subnet after receiving the request from the receiver (column 11, lines 50-53, column 12, lines 34-35).

12. Regarding claim 22, Zhang taught a method for providing and maintaining a real-time broadcast to a wireless receiver on a communications network (column 11, lines 26-32), comprising the steps of:

providing the real-time broadcast into the receiver in a first subnet using a multicast communication (column 11, lines 13-22);

receiving from the wireless receiver, a request to receive the real-time broadcast in a second subnet so as to move the real-time broadcast from the first subnet to the second subnet (column 9, lines 34-43); and

after receiving the request from the wireless receiver, providing the real-time broadcast to the wireless receiver in the second subnet using the multicast communication (column 13, lines 16-22, column 14, lines 7-12).

13. Regarding dependent claim 23, Zhang taught further comprising the step of: stopping a transmission of the real-time broadcast in the first subnet after receiving the request from the receiver (column 11, lines 50-53, column 12, lines 34-35).

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14. Regarding dependent claim 24, Zhang taught the wireless receiver (column 6, lines 29-35) includes an Internet Protocol (IP) interface which enables the receiver the real-time broadcast via an IP-type multicast communication (column 11, lines 26-32).

15. Regarding dependent claim 25, Zhang taught the real-time broadcast is received on at least one global multicast channel (column 6, lines 12-15, column 13, lines 1-3), and further comprising the steps of:

associating at least one location multicast channel with the at least one global multicast channel (column 12, lines 52-67); and

establishing communication to the wireless receiver over the at least one local multicast channel, and wherein the real-time broadcast is provided to the wireless receiver by routing the real-time broadcast from the at least one global multicast channel to the at least one local multicast channel (column 12, lines 19-29, column 13, lines 1-22).

16. Regarding claim 31, Zhang taught a method for monitoring the number of receivers that receive a broadcast via a communication network (IGMP), comprising the steps of:

providing the broadcast to at least one of the receivers on at least one local multicast channel; (column 13, lines 1-22) and

at a predetermined time and using multicast communication (column 14, lines 59-62), determining the number of receives which are receiving the broadcast, the number being determined by receiving information from the receivers indicative of the response signals being transmitting by the receivers (column 15, lines 3-8).

17. Regarding claim 34, Zhang taught a software arrangement configured to facilitate a broadcast of content to a receiver via a communication network, wherein, in operation, the software arrangement configures a processor to perform the steps (abstract) comprising of:

a) receiving the broadcast on at least one global multicast channel (column 6, lines 12-15, column 13, lines 1-3);

b) associating at least one local multicast channel with the at least one global multicast channel (column 12, lines 52-67);

c) connecting the receiver to the at least one local multicast channel (column 12, lines 19-29); and

d) routing the broadcast from the at least one global multicast channel to the at least one local multicast channel to provide the broadcast to the receiver (column 13, lines 1-22).

18. The language of claim 32 is substantially the same as previously rejected claim 34. Therefore, claim 32 is rejected on the same rationale as previously rejected claim 34, above.

19. The language of claims 36-37 is substantially the same as previously rejected claims 22 and 31, respectively. Therefore, claims 36-37 are rejected on the same rationales as previously rejected claims 22 and 31, respectively.

20. Claims 17-18 and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Allen et al., USPN 5,892,535 (hereafter referred to as Allen).

21. Regarding claim 17, Allen taught a method for providing a respective predefined content to a receiver during a real-time broadcast of normal content (abstract), comprising the steps of:

receiving the real-time broadcast of normal content from a remote device via a multicast communication (column 5, lines 34-56, column 51, lines 56-62), the real-time broadcast including information indicative of a respective time and a duration of at least one break in the broadcast of the normal content (column 32, lines 22-33);

inserting the respective predefined content into the real-time broadcast during the at least one break in the normal content (column 32, lines 33-39); and

providing the real-time broadcast to the receiver after the respective predefined content have been inserted into the at least one break in the normal content of the real-time broadcast (column 33, lines 34-53, column 33, line 65 - column 34, line 17).

22. Regarding dependent claim 18, Allen taught the respective predefined content includes at least one of an advertisement, a station break announcement, a promotion and other pre-recorded content for global broadcast (column 30, lines 38-40).

23. Regarding claim 35, Allen taught software arrangement configured to facilitate a respective predefined content to a receiver during a real-time broadcast of normal content, wherein, in operation, the software arrangement configures a processor to performs the steps (abstract) comprising of:

receiving the real-time broadcast of normal content from a remote device via a multicast communication (column 5, lines 34-56, column 51, lines 56-62), the real-time

broadcast including information indicative of a respective time and a duration of at least one break in the broadcast of the normal content (column 32, lines 22-33);

inserting the respective predefined content into the real-time broadcast during the at least one break in the normal content (column 32, lines 33-39); and

providing the real-time broadcast to the receiver after the respective predefined content have been inserted into the at least one break in the normal content of the real-time broadcast (column 33, lines 34-53, column 33, line 65 - column 34, line 17).

24. Claims 27-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Byrne et al., USPN 5,990,883 (hereafter referred to as Byrne).

25. Regarding claim 27, Byrne taught a receiver (column 2, lines 33-39) comprising:
a tuner receiving at least one of a radio broadcast and a television broadcast (column 5, lines 14-22);

an Internet Protocol-type communication device configured to receive a real-time Internet Protocol broadcast via a multicast communication (column 5, lines 23-29); and
a switching device switchably coupled between the tuner and the Internet Protocol-type communication device (column 5, lines 33-39).

26. Regarding dependent claim 28, Byrne taught the switching device is switchable between a first state and a second state, the first state enabling the tuner to receiver broadcast signals, the second state enabling the Internet Protocol-type communication device to receiver Internet Protocol type data using the multicast communication (column 5, lines 33-39).

Claim Rejections - 35 USC § 103

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

28. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

29. Claims 3-8, 13-16, 26 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang in view of Allen.

30. Regarding dependent claim 3, Zhang taught further comprising the step of:

f) inserting the broadcast into the at least one global multicast channel (column 4, lines 66-67); and

g) transmitting the broadcast at the at least one global multicast channel transmitting a broadcast to a local server (column 6, lines 12-15, column 4, lines 66-67).

Zhang does not specifically teach the source of the broadcast. However, Allen taught

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transmitting a broadcast from a global server to a local server (column 16, lines 16-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Allen's transmitting a broadcast from a global server to a local server would have improved system efficiency. The motivation would have been to provide a digital video file server system that can be readily integrated with minimal disruption.

31. Regarding dependent claim 4, Zhang taught the at least one global multicast channel is a plurality of global multicast channels, and the at least one local multicast channel is a plurality of local multicast channels (column 12, lines 52-63), wherein the broadcast is inserted into a first global channel of the global multicast channels, wherein the first global channel is associated with a first local channel of the local multicast channel, and wherein the receiver receives the broadcast from the first global channel on the first local channel (column 13, lines 1-13).

32. Regarding dependent claim 5, Allen taught the broadcast is inserted into the first global channel by the global server, and wherein the global multicast channels are received by the local server (column 17, lines 8-13).

33. Regarding dependent claim 6, Allen taught further comprising the steps of:

h) at the global server, further inserting a further broadcast of content into a second global channel of the global multicast channels (further broadcast = different broadcast different channels, column 16, lines 30-37).

Zhang taught further comprising the steps of:

i) receiving a request from the receiver to receive the further broadcast from the local server; j) if the second global channel is not available to the local server, obtaining access for the local server to the second global channel; k) after step (i), associating the second global channel with a second local channel of the local multicast channels (column 13, lines 26-40, 45-51); and providing the further broadcast to the receiver by connecting the receiver to the second local channel and routing the further broadcast from the second global channel to the second local channel (column 13, lines 1-12).

34. Regarding dependent claim 7, Zhang taught the at least one global multicast channel is a plurality of global multicast channels, and the at least one local multicast channel is a plurality of local multicast channels (column 12, lines 52-63), wherein the broadcast is inserted into a particular global channel, and wherein the broadcast from the global multicast channels are received by a local broadcasting device (column 13, lines 1-13). Zhang does not specifically teach a global broadcasting device. However, Allen taught a global broadcasting device (column 17, lines 8-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Allen's global broadcasting device in Zhang's system for multicasting data would have improved system efficiency. The motivation would have been to provide a cost-effective digital video file server system that can be readily integrated into existing system with minimal disruption.

35. Regarding dependent claim 8, Allen taught further comprising the steps of:

m) inserting a local broadcast into a particular channel of the local multicast channels, the local broadcast being different from a prior broadcast transmitted to the particular local channel (column 16, lines 45-60); and

n) if the receiver issues a request to receiver the local broadcast, establishing a communication link for the receiver to the particular channel to receive the local broadcast (column 16, lines 30-37).

36. Regarding dependent claim 13, Zhang does not specifically teach breaks in the broadcast. However, Allen taught normal content of the broadcast has at least one break of respective predetermined duration (column 17, lines 38-46), and further comprising the steps of:

s) inserting respective predefined content data into the at least one break in the normal content of the broadcast (column 17, lines 46-51); and

t) providing the broadcast to the receiver after respective predefined content data is inserted into the at least one break of the normal content of the broadcast (column 17, lines 52-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Allen's breaks in Zhang's system for multicasting data would have improved system effectiveness. The motivation would have been to provide targeted programming such that distribution of video programming is matched to the needs of a specific audience.

37. Regarding dependent claim 14, Allen taught the predefined content includes at least one of an advertisement, a station break announcement, a promotion and other pre-recorded content (column 17, lines 52-61).

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38. Regarding dependent claim 15, Zhang does not specifically teach breaks in the broadcast. However, Allen taught the local broadcast has at least one break at a respective time and of a respective predetermined duration (column 17, lines 38-46), and further comprising the steps of:

u) inserting respective predefined content into the local broadcast during at least one break in the normal content of the local broadcast (column 17, lines 46-51); and

t) providing the local broadcast to the receiver after the respective predefined content is inserted into the at least one break of the normal content of the local broadcast (column 17, lines 52-61). For motivation for combination see claim 13, above.

39. Regarding dependent claim 16, Allen taught the predefined content includes at least one of an advertisement, a station break announcement, a promotion and other pre-recorded content (column 17, lines 52-61).

40. Regarding dependent claim 26, Zhang taught the receiver is a wireless receiver (column 6, lines 29-35). Zhang does not specifically teach breaks.

However, Allen taught normal content of the real-time broadcast has at least one break at a respective time and for a respective duration (column 32, lines 22-33), further comprising the steps of:

inserting the respective predefined content into the real-time broadcast during the at least one break in the normal content (column 32, lines 33-39); and

providing the real-time broadcast to the receiver after the respective predefined content is inserted into the real-time broadcast during the at least one break in the

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normal content (column 33, lines 34-53, column 33, line 65 - column 34, line 17). For motivation for combination see claim 13, above.

41. Regarding dependent claim 33, Allen taught a start of the at least one break triggers the inserting step (column 33, lines 3-19).

42. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Zhang.

43. Regarding dependent claim 19, Allen does not specifically teach mapping between a global multicast channel and a local multicast channel. However, Zhang taught the real-time broadcast is received on at least one global multicast channel (column 6, lines 12-15, column 13, lines 1-3), and further comprising the steps of:

associating at least one location multicast channel with the at least one global multicast channel (column 12, lines 52-67); and

establishing a network link between the receiver and the at least one local multicast channel, and wherein the real-time broadcast is provided to the receiver by routing the real-time broadcast from the at least one global multicast channel to the at least one local multicast channel (column 12, lines 19-29, column 13, lines 1-22). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Zhang's mapping a global multicast channel to a local multicast channel would have provided cost-effective integration by utilizing existing networks for multicasting. The motivation would have utilized the advantages of integration of Allen's hierarchal distribution system in a digital network for mobile receivers.

44. Regarding dependent claim 20, Allen does not specifically teach a wireless receiver. However, Zhang taught the receiver is wireless and receives the real-time broadcast in a first subnet using a multicast communication (column 6, lines 10-21), and further comprising the steps of:

receiving, from the receiver a request to receive the real-time broadcast in a second subnet so as to move the real-time broadcast from the first subnet to the second subnet (column 9, lines 34-43); and

after receiving, the request from the receiver, providing the real-time broadcast to the wireless receiver in the second subnet using the multicast communication (column 10, lines 6-21, column 12, lines 19-29). For motivation for combination see claim 19, above.

45. Regarding dependent claim 21, Allen does not specifically teach IP-type multicast communication. However, Zhang taught the receiver includes an Internet Protocol (IP) interface which enables the receiver to receive the real-time broadcast via an IP-type multicast communication. It would have been obvious that one of ordinary skill in the art at the time the invention was made that incorporating Zhang's IP-type multicast communication in Allen's system for hierarchal system for distributing programming would have provided cost-effective integration by utilizing existing networks for multicasting. The motivation would have utilized the advantages of integration of Allen's hierarchal distribution system in a digital network for mobile receivers.

46. Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne in view of Zhang.

47. Regarding dependent claim 29, Byrne does not specifically teach levels of multicasting. However, Zhang taught the Internet Protocol type communication device is connected to at least one local multicast channel for receiving the real-time broadcast from a global multicast channel (column 11, lines 25-31, column 13, lines 1-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Zhang's levels of multicasting in Byrne's system for utilizing a receiver would have improved system effectiveness. The motivation would have been to promote cost-effectiveness by integrating an existing network to provide sources of content.

48. Regarding dependent claim 30, Byrne does not specifically teach a wireless receiver. However, Zhang taught wherein the receiver is wireless (column 6, lines 29-35), and the Internet Protocol-type communication device receives the real-time broadcast in a first subnet using the multicast communication (column 13, lines 1-8),

wherein, prior to the wireless receiver moving from the first subnet to a second subnet, the Internet Protocol-type communication device transmits a request to receive the real-time broadcast in the second subnet (column 9, lines 34-43); and

wherein, after transmitting the request, the Internet Protocol-type communication device receives the real-time broadcast in the second subnet by utilizing the multicast communication (column 10, lines 6-21, column 12, lines 19-29). It would have been obvious to one of ordinary skill in the art at the time the invention was made that

incorporating Zhang's wireless receiver in Byrne's system for utilizing a receiver would have improved system effectiveness. The motivation would have been to provide for minimal disruption when a receiver is moved within a distribution network.

Conclusion

49. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

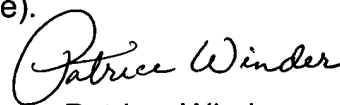
- a. Bo Ryu et al., Managing IP Services over a PACS Packet Network: taught IP datagrams are delivered to PACS users through the PACS packet mode data service, achieving more efficient usage of wireless resources and supporting multimedia applications such as Mbone audio and video;
- b. Almeroth et al., Using Satellite Links as Delivery Paths in the Multicast Backbone (Mbone): taught the basic feasibility of delivering Mbone sessions over a satellite network;
- c. Monteiro et al., USPN 5,778,187: taught a scalable architecture including multiple channels of information available simultaneously to be delivered to users;
- d. Donahue et al., USPN 6,101,180: taught high bandwidth broadcast system having localized multicast access to broadcast content;
- e. Birdwell et al., USPN 6,108,706: taught transmission announcement system and method for announcing upcoming data transmissions over a broadcast network; and

- f. Bakre et al., USPN 6,671,276 B1: taught architecture for mapping Internet Protocol (IP) multicast and Integrated Services over ATM networks.

50. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrice Winder whose telephone number is 703-305-3938. The examiner can normally be reached on Monday-Friday, 10:30 am-7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 703-305-9705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrice Winder
Primary Examiner
Art Unit 2145

August 31, 2004